Page 1 of 9



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/083,620A

DATE: 06/06/2002

TIME: 15:05:43

Input Set : A:\38275.txt



```
3 <110> APPLICANT: Loughney, Kate
     5 <120> TITLE OF INVENTION: Phosphodiesterase 10
     7 <130> FILE REFERENCE: 27866/38275
     9 <140> CURRENT APPLICATION NUMBER: 10/083,620A
2 10 <141> CURRENT FILING DATE: 2002-05-30
                                                               ENTERED
    12 <150> PRIOR APPLICATION NUMBER: 09/256,000
    13 <151> PRIOR FILING DATE: 1999-02-23
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     18 <160> NUMBER OF SEQ ID NOS: 26
     20 <170> SOFTWARE: PatentIn Ver. 2.0
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     24 <212> TYPE: DNA
     25 <213> ORGANISM: Homo sapiens
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     29 <222> LOCATION: (26)..(1423)
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                                    Met Asp Ala Phe Arg Ser Thr Pro Tyr
     33
                                      1
     36 aaa gtg aga cct gtg gcc atc aag caa ctc tcc gag aga gaa gaa tta
                                                                          100
     37 Lys Val Arg Pro Val Ala Ile Lys Gln Leu Ser Glu Arg Glu Glu Leu
                             15
     40 atc cag agc gtg ctg gcg cag gtt gca gag cag ttc tca aga gca ttc
                                                                           148
     41 Ile Gln Ser Val Leu Ala Gln Val Ala Glu Gln Phe Ser Arg Ala Phe
                                              35
                         30
     42
     44 aaa atc aat gaa ctg aaa gct gaa gtt gca aat cac ttg gct gtc cta
                                                                           196
     45 Lys Ile Asn Glu Leu Lys Ala Glu Val Ala Asn His Leu Ala Val Leu
                                          50
                     45
     48 gag aaa cgc gtg gaa ttg gaa gga cta aaa gtg gtg gag att gag aaa
                                                                           244
     49 Glu Lys Arg Val Glu Leu Glu Gly Leu Lys Val Val Glu Ile Glu Lys
                                      65
     52 tgc aag agt gac att aag aag atg agg gag gag ctg gcc aga agc
                                                                           292
     53 Cys Lys Ser Asp Ile Lys Lys Met Arg Glu Glu Leu Ala Ala Arg Ser
                                  80
     56 agc agg acc aac tgc ccc tgt aag tac agt ttt ttg gat aac cac aag
                                                                           340
     57 Ser Arg Thr Asn Cys Pro Cys Lys Tyr Ser Phe Leu Asp Asn His Lys
                                                                     105
                                                 100
                             95
     60 aag ttg act cct cga cgc gat gtt ccc act tac ccc aag tac ctg ctc
                                                                           388
     61 Lys Leu Thr Pro Arg Arg Asp Val Pro Thr Tyr Pro Lys Tyr Leu Leu
                                             115
                         110
     62
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DATE: 06/06/2002 RAW SEQUENCE LISTING TIME: 15:05:43 PATENT APPLICATION: US/10/083,620A

Input Set : A:\38275.txt

Output Set: N:\CRF3\06062002\0003020112011	
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64 tct cca gag acc atc gag gcc ctg cgg dag 665 Tr 65 Ser Pro Glu Thr Ile Glu Ala Leu Arg Lys Pro Thr Phe Asp Val Trp	
	484
69 Leu Trp Glu Pro Asn Glu Met Leu Sei Cys Bod 150	
70 140 agg atc aac cct gtc acc ctc agg	532
TO A TOU CAN TAIL VAL AND AND PHE SEL TECHNOLOGY	
73 ASP Lett GIY Lett val 185 160 165	580
74 155 76 agg tgg ctg ttc tgc gtc cac gac aac tac aga aac aac ccc ttc cac 76 agg tgg ctg ttc tgc gtc cac gac aac tac aga aac aac ccc ttc cac	500
77 Arg Trp Leu Phe Cys Val His Asp Ash Tyl Mag	
78 170 1/5 the sta agg dag atg atg tac agc atg gtc	628
80 aac ttc cgg cac tgc ttc tgc gtg gtc cug utg utg utg utg utg utg utg utg utg u	
81 Asn Phe Arg HIS Cys File Cy	676
02 and the tea can acq gat atc cly atc	6/0
85 Tro Leu Cys Ser Leu Gin Giu Lys File Ser 315	
86 205 210 213	724
86 205 210 88 cta atg aca gcg gcc atc tgc cac gat ctg gac cat ccc ggc tac aac 89 Leu Met Thr Ala Ala Ile Cys His Asp Leu Asp His Pro Gly Tyr Asn 230	
90 220 and aca gag ctg gcg gtc cgc tac aat	772
02 Agn Thr Tyr Gln Ile Ash Ald Alg Illi Gla 250 55	
	820
94 235 240 96 gac atc tca ccg ctg gag aac cac cac tgc gcc gtg gcc ttc cag atc	
97 Asp Ile Ser Pro Leu Glu Ash HIS HIS CYS MAG 260 265	
98 250 253 and ato the tree and ato cea cet gat ggg	868
100 ctc gcc gag cct gag tgc adc atc ttc tcc das alle Pro Pro Asp Gly 101 Leu Ala Glu Pro Glu Cys Asn Ile Phe Ser Asn Ile Pro Pro Asp Gly 275 280	
101 Led A14 G14 115 225 280 275 275 280 275	916
102 270 270 270 270 270 270 270 270 270 2	,_,
105 Phe Lys Gln Ile Arg Gln Gly Met 11e 1m 200 295	
106 285 at the test the again gag aga at gag	964
108 atg gca aga cat gca gaa att atg gat tot doo and 300 Met Ala Arg His Ala Glu Ile Met Asp Ser Phe Lys Glu Lys Met Glu 305 310	
109 Met Ala Alg His Ala Sia 305 310	1012
gag atg acc ctg ctg day acg acc	1012
113 Asn Phe Asp Tyr Ser Ash Glu Glu HIS Mee 200	
114 315 320 and gag gtc cgt cca atg gaa gtc	1060
116 ttg ata aaa tgc tgt gat atc tct aac gag geo og Pro Met Glu Val 117 Leu Ile Lys Cys Cys Asp Ile Ser Asn Glu Val Arg Pro Met Glu Val	
117 Leu Ile Lys Cys Cys Rsp 116 Ber 1351 340	1100
118 330	1108
121 Ala Clu pro Trp. Val ASP Cys Leu Leu Clu Clu Clu Clu	
350 350 350 350 350 350 350 350 350 350	1156
125 Asp Arg Glu Lys Ser Glu Gly Led F10 val 1125	
126 365 370 128 gac aaa gtg acc aag gcc aca gcc cag att ggg ttc atc aag ttt gtc	1204
128 gac aaa gug acc aag goo aca goo ang goo ang goo	

DATE: 06/06/2002 RAW SEQUENCE LISTING TIME: 15:05:43 PATENT APPLICATION: US/10/083,620A

Input Set : A:\38275.txt

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129																			
130 132			380			~ ~ ~ ~		at a	acc	aaq	ctc	ttc	ccc	atg	gtt	gag	-	1252	
132 133	ctg	atc	cca -	atg	Dha	Clu	Thr	y c y Val	Thr	LVS	Leu	Phe	Pro	Met	Val	Glu			
134 136		395						+ ~ ~	722	tcc	cga	σat	cac	tac	gag	gag	٠.:	1300	
136	gag	atc	atg	ctg	cag	cca	CLL	Lgg	gaa	Cor	λrα	Asn	Ara	Tvr	Glu	Glu			
136 137	Glu	Ile	Met	Leu	GIn	Pro	Leu	тгр	GIU	261	420	P	,	•		425	,		
																		1348	
		aag	cgg	ata	gat	gac	gcc	atg	aaa	gag	tta	Cay	Tare	Lug	Thr	Asp)		
141	Leu	Lys	Arg	Ile	Asp	Asp	Ala	Met	Lys	Gia	Leu	GIII	цуз	цуэ	440				
																		1396	
111	age	t.t.a	acq	tct	ggg	gcc	acc	gag	aag	tcc	aga	ggg	aga	ayu	aya	Acr	`		
1/5	Ser	Leu	Thr	Ser	Gly	Ala	Thr	Glu	Lys	Ser	Arg	GIY	Arg		_	Hol	,	•	
				A A E					4.30									1443	
140	~+ ~	222	aac	aσt	gaa	qqa	gac	tgt	gcc	tgag	ggaaa	agc	gggg	ggcg	rtg			T442	
140	y L y	Tuc	λen	Ser	Glu	Gĺv	Ásp	Cys	Ala										
											*							4500	
150			460	L		at a	acca	aget	а са	caaa	atcc	ttg	tgca	ggg	aaga	gct	gcc	1503 1548	' -
152	gct	gcag	ttc	tyya	cggg	22 4	acca	tatt	t ta	taaqa	aacc	att	tt					1548	
154	ctg	ggca	cct	ggca	ccac	aa y	accu	cycc		J		,							
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159	<21	2> T	YPE:	PRT															
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162	<40	0> · S	EQUE	NCE:	2			_		T	37.5.1	7 20	Dro	. Vai	1 Ala	a Il	e		
163	Met	Asp	Ala	Phe	. Arg	Ser	Thr	Pro	Tyr	Lys	Val	ALG	FIC	, , ,	1	5			
166	Lvs	Glr	Leu	ser	Glu	Arg	, Glu	Glu	Leu	ıııe	GIN	Sei	. vai	3	α Λ				
169	Va1	Ala	Glu	Glr	ı Phe	Sei	Arg	Ala	Phe	. Lys	ıııe	ASI	1 616	-	u Dy.	3 212			•
170	Glu	Va-1	Ala	. Asr	n His	Leu	ı Ala	Val	Let	ı Glu	Lys	arç	y va.	r Gr	и ье	u Gi	.u		
175	C15	7 T.DI	i T.V.S	. Val	l Val	. Glu	ı Ile	e Glu	ı Lys	з Суя	: Lys	s Se	r Asj	b 11	е гх	s гу	5		
176	0.) - 1\	- 01.	. Cli	1 T.A1	1 Ala	a Ala	a Arc	ı sei	r Ser	Arg	Th:	r Asi	n Cy	s Pr	о Су	7S		
179) _	_		nh.	. TO) 1 1 1 1 1 1 1	p Ası	n His	s Lv:	s Lys	s Lei	ı Th	r Pr	o Ar	g Ar	g As	sp		
182	2		_	100	0		s Ty	r Tol	ı I.e.	n Sei	r Pro	o G1	u Th	r Il	e Gl	u Al	La		
185	5 .		11	5		_,	e Ası	172	U Tirr~	n Lei	וידיים נו	n G1	u Pr	o As	n Gl	u Me	et		
187	7 Lei	u Ar	g Ly	s Pr	o Thi	r Ph	e AS	pva.	T TT	р пе	u 11)	14	0						
188	3	13	0				13	5			n. T ^	, <u>7</u> 1	√ 17 T.Δ	u Va	al Ar	q As	sp		
190) Le	u Se	r Cy	s Le	u Gl	u Hi	s Me	t Ty	r Hl	s AS	b re	ս Եւ	λ ne	+ 0		11	60		
19	3 Ph	e Se	r Il	e As	n Pr	o Va	o 1 Th	r Le	u Ar	g Ar	g Tr	ь ге	u Pn	ie C)	75 Va 17			•	
10	- 6 de	n Ac	n Tv	r Ar	g As	n As	n Pr	o Ph	e Hi	s As	n Ph	e Ar	g Hi	s C	ys Pi	ie C	y S		
17	/ 0. 17-	ן או	a G1	n Ma	t Me	t. Tv	r Se	r Me	t Va	l Tr	p Le	u Cy	s Se	er Le	eu G.	ın G	ıи		
19	y va	T A1	a GL	n ne	.c Mc	1													

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/083,620A

DATE: 06/06/2002
TIME: 15:05:43

Input Set : A:\38275.txt

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200
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   202 Lys Phe Ser Gln Thr Asp Ile Leu Ile Leu Met Thr Ala Ala Ile Cys
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          210
   205 His Asp Leu Asp His Pro Gly Tyr Asn Asn Thr Tyr Gln Ile Asn Ala
                                   235
                         230
   208 Arg Thr Glu Leu Ala Val Arg Tyr Asn Asp Ile Ser Pro Leu Glu Asn
                                       250
                     245
   211 His His Cys Ala Val Ala Phe Gln Ile Leu Ala Glu Pro Glu Cys Asn
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   212 260
   214 Ile Phe Ser Asn Ile Pro Pro Asp Gly Phe Lys Gln Ile Arg Gln Gly
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   215 275
   217 Met Ile Thr Leu Ile Leu Ala Thr Asp Met Ala Arg His Ala Glu Ile
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    218 290
   220 Met Asp Ser Phe Lys Glu Lys Met Glu Asn Phe Asp Tyr Ser Asn Glu
    221 305 310
   223 Glu His Met Thr Leu Leu Lys Met Ile Leu Ile Lys Cys Cys Asp Ile
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                                      330
   226 Ser Asn Glu Val Arg Pro Met Glu Val Ala Glu Pro Trp Val Asp Cys
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    229 Leu Leu Glu Glu Tyr Phe Met Gln Ser Asp Arg Glu Lys Ser Glu Gly
                                360
              355
    232 Leu Pro Val Ala Pro Phe Met Asp Arg Asp Lys Val Thr Lys Ala Thr
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                             375
           370
    235 Ala Gln Ile Gly Phe Ile Lys Phe Val Leu Ile Pro Met Phe Glu Thr
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                         390
    238 Val Thr Lys Leu Phe Pro Met Val Glu Glu Ile Met Leu Gln Pro Leu
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    241 Trp Glu Ser Arg Asp Arg Tyr Glu Glu Leu Lys Arg Ile Asp Asp Ala
                                    425
    242 420
    244 Met Lys Glu Leu Gln Lys Lys Thr Asp Ser Leu Thr Ser Gly Ala Thr
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    250 Cys Ala
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    261 <222> LOCATION: 130
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    269 <220> FEATURE:
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DATE: 06/06/2002

TIME: 15:05:43

Input Set : A:\38275.txt Output Set: N:\CRF3\06062002\J083620A.raw 271 <222> LOCATION: 205 272 <223> OTHER INFORMATION: N = A, T, G, or C 274 <400> SEQUENCE: 3 275 agcgaccgtg agaagtcaga aggccttcct gtggaaccgt tcatggaccg agacaaagtg 60 277 accaaggcca cagcccagat tgggttcatc aagtttgccc tgatcccaat gtttgaaaca 120 279 gtgaccaagn tcttccccat ggttgaggag atcatgctgc agccactttg ggaatcccga 180 281 gatcgntacg aggagctgaa gcggntagat gacgccatga aagag 284 <210> SEQ ID NO: 4 285 <211> LENGTH: 158 286 <212> TYPE: DNA 287 <213> ORGANISM: Homo sapiens 289 <220> FEATURE: W--> 290 <221> NAME/KEY: misc feature 291 <222> LOCATION: 12 292 <223> OTHER INFORMATION: N = A, T, G, or C295 <220> FEATURE: W--> 296 < 221 > NAME/KEY: misc feature297 <222> LOCATION: 37 298 <223> OTHER INFORMATION: $N = \hat{A}$, T, G, or C 300 <220> FEATURE: W--> 301 <221> NAME/KEY: misc feature 302 <222> LOCATION: 62 303 <223> OTHER INFORMATION: N = A, T, G, or C305 <220> FEATURE: W--> 306 <221> NAME/KEY: misc feature 307 <222> LOCATION: 110 308 <223> OTHER INFORMATION: N = A, T, G, or C 310 <400> SEQUENCE: 4 -> 311 gtaccagatc antgecegea cagagetgge ggteegntae aatgacatet cacegttgga 60 313 gnaaccacca etgegeegtg geetteeaga teetegeega geetgagtgn aacatettet 120 315 ccaacatccc acctgatggg ttcaagcaga tccgacag 318 <210> SEQ ID NO: 5 319 <211> LENGTH: 98 320 <212> TYPE: DNA 321 <213> ORGANISM: Homo sapiens 323 <220> FEATURE: W--> 324 <221> NAME/KEY: misc feature 325 <222> LOCATION: 14 326 <223> OTHER INFORMATION: N = A, T, G, or C 328 <220> FEATURE: W--> 329 <221> NAME/KEY: misc feature 330 <222> LOCATION: 22 331 <223> OTHER INFORMATION: N = A, T, G, or C 333 <220> FEATURE: W--> 334 <221> NAME/KEY: misc feature 335 <222> LOCATION: 50 336 $\langle 223 \rangle$ OTHER INFORMATION: N = A, T, G, or C 338 <400> SEQUENCE: 5 (w) 339 gagaacacca ctgngccgtg gncttccaga tcctcgccga gcctgagtgn aacatcttct 60

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/083,620A

RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/10/083,620A DATE: 06/06/2002 TIME: 15:05:44

Input Set : A:\38275.txt

Output Set: N:\CRF3\06062002\J083620A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:5; N Pos. 14,22,50

Seq#:6; N Pos. 1,267,352,400,411

Seq#:7; N Pos. 1,82,92,130,347,390,396

Seq#:8; N Pos. 63,98,107,188,203,206,238,252,297,370,389,427

Seq#:11; N Pos. 155,393,442